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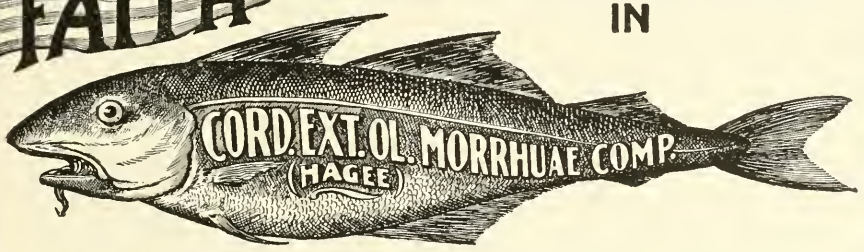

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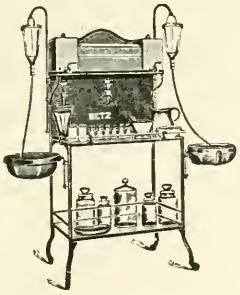

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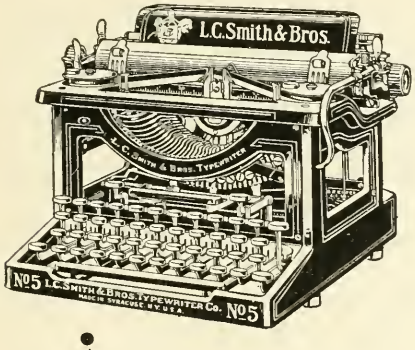

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THE NECESSITY OF DIRECT EXAMINATION OF THE LOWER BOWEL FOR THE DIAGNOSIS AND TREATMENT OF DIARRHEA.*

By G. Milton Linthicum, A.B., A.M., M.D.

Professor of Diseases of Colon and Rectum, Baltimore Medical College; Former President Medical and Chirurgical Faculty of Maryland.

In selecting such a title for my remarks, I do it realizing the latitude of the possibilities which might be included under such a title, but shall confine myself to the meaning of diarrhea, regarding it from its Greek derivation "to flow through," or an abnormal frequency and liquidity of fecal discharges, entirely as a symptom of disease and not a disease *per se*.

While medical literature treats it as a distinctive disease, offering various descriptive names to it suggestive of its cause, this by virtue of long usage has made it authoritative, yet, at the same time, has had a tendency to cloud the situation and rob it of very great significance as a symptom in many serious troubles which should be investigated with the greatest attention and exactitude.

I may not offer you anything new, but I hope to collate under this title some of the facts which associates diarrhea as a symptom, and thereby call more attention to the possible factors which often bear causative relations to its production.

As is well known, diarrheic stools are caused by the increased amount of fluid in the stools, due to some factor which upsets the equilibrium between the absorption and excretion of the water in the small or large intestine; or causes increased peristalsis, which hurries the contents with such rapidity as to not permit of absorption.

This abnormal or exaggerated peristalsis may be produced in a number of ways without any marked anatomical changes in the intestine; such cases are usually confined to the small intestine and are due to more or less known etiological factors, and are known as fermentative, lienteric or irritative diarrheas. It is in these forms of diarrheas that recognition is comparatively easy, and

*Read before the Medical and Chirurgical Faculty of Maryland at Cambridge, November 12, 1912.

the treatment usually correct from the mere recital of the case history by the patient. It is they which have given to us the security of a correct opinion, and have made us more or less careless in dealing with all diarrheas.

On the other hand, diarrheas are due to pathological peristalsis, caused by anatomical changes in the intestine; in such cases the diarrhea is a symptom of the diseased intestine. It is to these conditions I will attempt to direct attention, for it is in them that the true causative factor is often not recognized. I have found that the existence of more than two weeks' duration of any diarrhea is extremely suggestive of these anatomical changes, to determine the character and treatment of which I cannot emphasize too strongly the necessity of direct examination of the lower bowel through some form of apparatus which will permit of the inspection of the lesion itself.

One so often finds diarrheal discharges treated without any examination whatever to determine its real character; indeed, until recently the rectum seemed to be the last point to be investigated intelligently.

I recall myself operating only recently for a malignant growth, and in another for a syphilitic stricture, both of which had been treated surgically for hemorrhoids without investigating higher up, which should direct our attention even in treating cases with external maladies to the possibility of other existing conditions. In both of these cases, however, were diarrheal discharges which were not attributable to the hemorrhoids.

Neither macroscopic nor microscopic examination of the feces, upon which so much stress has been laid in the past, presents conclusive results.

The presence of undigested food regarded as a clinical symptom of small intestinal involvement is not positive, as not infrequently irritative lesions of the lower bowel may reflexly stimulate peristalsis in the upper tract, causing too rapid passage of its contents before digestion is complete into the diseased lower bowel, from which it is expelled.

The presence of mucus, when admixed with feces, is suggestive of involvement of the small intestine, and when coating the feces large intestinal involvement; yet its presence is of little value, for almost any irritation in the tract may cause its excessive secretion.

The presence of pus or blood is a positive sign of ulceration of some variety, but does not indicate the character or location of the lesion, nor does its absence negate the presence of lesions which have not undergone ulcerative changes; nor does it occur in the early stages of malignant or benign growths.

Pain is most often depended upon as an index to intestinal involvement, and is the predominating influence which brings the patient to the physician and directs the physician to a more careful investigation than any other symptom. Pain is extremely variable as to time of appearance and significance because of its

origin, the intestine being comparatively insensible to pain, except that brought about by pressure and increased motility of the musculature, which has been demonstrated by Dr. Arthur N. Hertz in his experiments upon the intestines, and described by him in the Goulstonian lectures March, 1911, under the title of "The Sensibility of the Alimentary Canal."

These experiments showed pain to be only produced in those diseases which were accompanied by abnormal or exaggerated motor activity, or in those diseases or conditions when there was distension of the stomach, small or large intestine; this distension being due to accumulation of gases or other intestinal contents, a condition often found in acute and chronic catarrhal colitis. Here the pain is more fullness and not the acute lancinating variety of peritonitis; it is rather a sense of uneasiness and is accompanied usually by diarrhea, caused by increased peristalsis.

On the other hand, ulceration, which at the beginning may have caused diarrhea and pain when not having involved adjacent viscera and not produced obstructive conditions, will in the absence of diarrhea be free of pain. Hertz has demonstrated that the pain which is caused by the passage of the intestinal contents over the ulcers is not due to the contents coming in direct contact with the ulcers, but to stimulation of the exposed nerve endings, "which are, because of their exposure, more sensitive," causing reflexly a spasmodic contraction of distal portions of the intestine, thereby increasing pressure within the intestines and, at the same time, the exaggerated peristalsis is urging the contents down against a spasmodic stricture. From this we may well gather that so long as the free passage of intestinal contents is not interfered with, or adjacent viscera involved, the symptom of pain will be absent in ulceration.

The pain one finds in malignant growths is not present until the tissues and adjacent viscera are involved, or until the growth has attained a size sufficient to produce more or less obstruction symptoms which dam back the fecal stream.

The diarrhea which results from the presence of malignant growths oftentimes occurs long ahead of the pain symptoms because of the presence of the growth acting as an irritant, increasing the blood flow to the parts with increased water elimination and, at the same time, stimulating peristalsis so as not to give time for intestinal contents to remain long enough in the colon for absorption of liquid elements by the blood stream.

Thus there is a contribution of the two factors in producing diarrhea in this condition, one of which in itself is sufficient. No doubt because of this we get what is termed the "explosive diarrhea," characterized by its intermittent nature of alternating with constipation. The importance of this symptom is its early appearance, and, with the exception of constipation, it is perhaps the earliest to appear, followed later by the usual pain; bloody and purulent discharges indicating by their appearance such great in-

volvement and destructive changes as to make the recognition of the trouble too late to be of much value for permanent relief by the only possible method of a hoped for cure—namely, operative.

The study of malignant growths of the intestinal tract shows them in the form of carcinoma, sarcoma and lympho-sarcoma, with carcinoma in its several varieties being the most frequent variety. In a series of 26,340 cases of carcinoma in the body generally, compiled by Maydl, Heimann, Zeimann, Nothnagel and Müller, it was found that 2255, or 8.56 per cent., were in the intestinal tract, with the predominant number in the colon and rectum.

Of 659 cases of intestinal carcinoma collated by Maydl, Nothnagel, Zeimann, Müller and Bryant, it was found that 6.22 per cent. were in small intestine, 6.82 per cent. in the cecum and appendix, 22.76 per cent. were in various portions of the colon and 64.18 per cent. in the sigmoid and rectum.

In a series of 1029 cases occurring in the rectum and sigmoid, the growth was located in the anus and rectum 901 times and in the sigmoid 128 times.

Thus, from these figures it is readily seen that an inspection can be made by direct examination in nearly 65 per cent. of all intestinal carcinoma at a time when the removal of the growth offers a fair hope of permanent relief, for it is generally felt by operators that there is less tendency to metastases in the lower bowel than in the other parts of the tract.

There is yet another phase in the consideration of malignant growths suggested by an observation made by Nothnagel which to me, in a study of the subject, seems extremely probable that as a graft carcinoma in the intestines may begin on old ulcer scar tissue, as we know to be the case in gastric carcinoma. For it can hardly be considered a mere coincidence to find that the frequency of location of growths, decubital or stercoral ulceration and strictures corresponds as closely as do these three lesions in the cecum, appendix, colon, sigmoid and rectum.

In these locations a correspondence of frequency is found in direct proportion to the consistency and length of stay of feces; no doubt due to injuries of the delicate mucosa by hardened feces causing subsequent inflammatory changes.

I cannot see how anyone can gainsay the fact that there is certainly more than a suggestive relationship between ulcers in the bowels and carcinoma. However, two-thirds, fortunately, of the bowel when these lesions are located can be directly inspected by the illuminated colon tube, and such ulcers can be seen, treated and most often cured.

It seems, therefore, fair to assume at least that the cure of these ulcers may later prevent secondary degeneration into carcinomata, and to state with certainty that strictures of non-malignant character are often the resultant of ulcers. The decubital or stercoral ulcers are caused by the hardened feces producing pres-

sure necrosis of the superficial mucosa, later purulent inflammation of the submucous membranes resulting, doubtless, from infection of various suppurative organisms. This form is almost entirely confined to the lower bowel, located especially in the flexures and rectum, with the appendix, however, a frequent site to which, no doubt, the inflammation of this organ is often due.

In the rectum they are numerous, producing a very extensive involvement; hence are usually described under the title of "proctitis ulcerosa." They are characterized by a very definite circular outline when isolated, but have a tendency to coalesce and unite, healing by cicatrization and contraction and resulting frequently in stenosis of the intestines. Following the stenosis, there is more marked stasis because of the obstruction, with later very pronounced ulcerative changes occurring in the mucosa above the stenosis, forming Kocher's "distension tumors." The mucous membrane lining of these sacs becomes thinned by distension, and because of the pressure and irritation of retained feces become punctured with ulcers due to destructive necrotic changes, to which ulcerated areas he applies the name "distension ulcers." (*Dehnungs-Geschwüre*).

It is to these strictures of the bowel that a syphilitic origin has almost universally been given, but now are regarded more frequently as being due to scar tissue of ulcerated areas; but it is in these cases of strictures that one often finds carcinomatous changes taking place, and to which Nothnagel refers in his observation as mentioned above.

The other groups of ulceration presenting diarrheal symptoms are those occurring occasionally as a result of catarrhal inflammation of the mucosa, either acute or chronic. They are usually termed catarrhal when beginning in the mucous membrane, and follicular when their origin is in the lymphatic follicles. The latter are largely confined to the upper rectum and sigmoid, because the solitary follicles are chiefly limited to this part of the tract.

The appearance of follicular ulcers may be that of the isolated round punched-out class, or may be so confluent as to involve almost the entire lining of the intestine. The early stage appearance is suggested by the manner of their development, each follicle having an opening on the surface extending into a minute cavernous excavation; later the lesion appearing as an inverted funnel, with its base gradually extending out by destructive changes, undermining the mucous membrane so that shreds as of a ragged curtain hang over the ulcerating depression.

As the disease progresses, the further involvement of deeper layers takes place, involving submucosa even into the musculature and may go on to perforation. Healing may take place in the early stage with only moderate destruction of tissue, or stenosis may occur. If the destruction is very great, the lesions do not heal, but remain as an extensive ragged surface, discharging pus and blood admixed with loose fecal discharges.

The simple catarrhal ulcers developing in the mucous membrane are really distinctive only pathologically, as the catarrhal and follicular are nearly always found associated when the trouble is at all severe. In mild forms of ulceration there may be present only small erosions of the mucosa confined to the superficial layers. Where severe forms are encountered the ulcerations become merged and present large suppurating areas with marked involvement of the mucosa, and may extend even into the muscles, but rarely cause perforation. The same general symptoms and visual picture through the sigmoidoscope are found in both of these varieties.

Primary tubercular ulceration is a very rare occurrence, and when found is almost always confined to young children and nurslings. In the Charite Hospital of Berlin, in 3104 cases of tuberculosis in children, there were only 16 of primary intestinal infection. The consensus of opinion is that infection is due to tuberculous milk. The variety of primary cases in adults is shown by the Munich Pathological Museum presenting only about one case in 1000 autopsies. The early symptoms are usually colicky pain with irregular diarrheas.

Tubercular ulceration secondary to lung involvement is of frequent occurrence, as shown by its occurrence 566 times in 1000 Munich autopsies of tubercular cases involving either the ileum, colon or cecum, from which points ulcerations may extend upward, but more often extend downward into the colon and sigmoid. They nearly always begin in the solitary follicles and later involve the mucosa.

The appearance of a tubercular ulcer is that of an irregular patch with usually swollen or undermined edges, as a rule of a light red color. The base presents a peculiar greasy appearance made up of varying stages of degeneration. The tendency of the ulceration is to spread and to involve adjacent areas, and at the same time to set up inflammatory changes in the serosa, so that localized peritonitis is nearly always present. The infrequency of primary ulcers of tubercular origin and the frequency of secondary development makes a diagnosis of tubercular ulcerations comparatively easy when found associated with the tubercular involvement of other organs.

Syphilitic ulceration of the intestine other than the rectum is rarely ever seen, although several cases have been reported in adults by Meschede, Klebs, Oser and Birch-Hirschfeld as occurring in the small intestine. They are frequently, however, encountered in the rectum as a rule, confined to the lowermost part just inside the sphincters. Their usual appearance is a very shallow depression with edges infiltrated and hard, having a grayish white color.

Virchow especially calls attention to the slight depth and smooth base as a distinguishing feature between syphilitic and dysenteric ulcers. Birch-Hirschfeld lays stress upon the peculiar cicatricial

induration in the immediate vicinity of syphilitic ulcers, which is less pronounced in dysenteric. The light-red margins of the tubercular ulcer is a distinguishing feature when compared with the grayish-white margin of the syphilitic. The great value of recognition of these ulcers is that the persistent diarrhea will only yield to anti-syphilitic treatment.

Furthermore, luetic ulcerations have apparently a greater tendency to form severe rectal strictures. Ulcerations occurring in the course of typhoid, diabetes and nephritis furnish the usual characteristics of the stercoral ulcers, and the symptoms occurring during the disease are similar. Ulcerations occurring in dysentery are usually due to the ameba dysenteric. These ulcerations are divided into three classes, which are probably stages in their development. The pre-ulceration stage presents the "small red spots" of Rogers from .2 to .5 m.m. in diameter, with moderate congestion of the mucosa and not much involvement of the submucosa.

The second stage, or the type of Harris, gives a punched-out appearance, round or oval in contour, with thick and congested edges; the third stage, usually the one seen, is known as the undermined ulcer and appears early as minute white or yellow spots in congested areas. Under these spots or openings are found cavities filled with necrotic tissue buried in the submucosa. From these areas extensive burrowing takes place, destroying the mucous and submucous layers, and even the muscles. These ulcers are confined almost entirely to the large intestine, involving the entire colon and upper rectum.

Of the symptoms of ulceration of any variety the one of paramount importance is the diarrhea, which is usually of the early morning variety, appearing first on rising, again after eating and frequently during the forenoon, after which there is comparative comfort.

When we recall that increased peristalsis or lack of absorption of the fluid, or both, are responsible for diarrhea, we can readily see that the majority of diarrheas caused by ulceration are due to their location in the large bowel, and, furthermore, the strongest probability is that the ulceration exists below the cecum and ascending colon. This fact is easily understood, for as long as there is sufficient of the large bowel intact and healthy, the absorption of water proceeds in a physiological manner.

The location of ulcers in the small intestine, cecum or ascending colon, unless complicated with catarrh of the intestine or some form of infection to stimulate exaggerated peristalsis, will rarely evidence diarrhea.

Examinations through the sigmoidoscope will permit of smears being made of the ulcerated areas and microscopic examination made, so that recognition of the tubercular bacilli, the spirocheta pallidae or ameba can be readily determined by microscopic examination and correct treatment instituted.

Gonorrheal proctitis is a comparatively rare occurrence, but may occasionally be seen, and is most frequent in women. It has been my fortune to see only one case; this involved the entire rectum up to the beginning of the sigmoid. The diagnosis was confirmed by the finding of the germ of Neisser. The patient applied for treatment because of frequency of stools, which were admixed with sanious pus.

Strictures, stenosis and growths of benign or malignant type usually present obstructive symptoms earlier than the diarrhea, usually with constipation alternating with diarrhea. This is due to the accumulated feces acting as an irritant and stimulating peristalsis producing diarrheal stools. If ulceration has taken place, pus and blood are found in large quantities. A direct examination will show the presence of the trouble and its removal may be instituted.

The treatment of ulcerative cases can be made directly to the parts effected through the tube, either by probangs or by the atomizer. Small growths of a benign nature may be removed with a snare. Growths suspected of malignancy may have a bit snipped off for examination.

To summarize in a few words:

1. Diarrhea should be regarded as a symptom of disease.
2. All chronic or sub-acute diarrheas are due to some form of a pathological lesion.
3. The character of the diarrheal discharge, while helpful in making the diagnosis, cannot be depended upon either to indicate the nature or location of the lesion.
4. Pain as a symptom is very misleading, as it is frequently absent in the most serious and present often to a marked degree in lesser lesions.
5. The necessity of direct examination is of the utmost importance, as early recognition in malignant growths gives the only hope of permanent relief.
6. The treatment of diarrheas locally in conjunction with systemic is essential.

817 Park Avenue, Baltimore, Md.

THE PHYSICIAN'S VISITING LIST. 1913. Philadelphia: P. Blakiston's Son & Co. Leather, $1.25.

Blakiston's Visiting List for 1913 contains all the valuable features of its predecessors. The one before us contains space for the entry of 25 patients per day or week, besides pencil, pockets, table of signs, table of incompatability, scheme for immediate treatment of poisoning, the metric or French decimal system of weights and measures, table for converting apothecaries' weights and measures into grams, physician's dose table, and other attractive features. As heretofore, it should meet the demands of the practitioner as a handy and useful method of keeping track of his daily work.

THE PROPHYLACTIC VALUE OF VACCINES IN TYPHOID FEVER.*

By J. Clement Clark, M.D., Superintendent,
Springfield State Hospital for the Insane, Sykesville, Md.

It is not the purpose of this paper to enter into a discussion of the etiology, diagnosis, prognosis or treatment of typhoid fever. They are too well known to all of you, typhoid fever having been a prevailing disease in certain seasons of the year in different sections of the country for more than a century; attacking, as a rule, young and vigorous people in the prime of life, and causing not only loss of life, but great suffering and financial loss to the individual and to the State. Statistics go to show that about 350,000 cases occur in the United States annually, and the financial loss is variously estimated at about $35,000,000. The extent to which typhoid fever is prevalent is often taken as a fair criterion of the development of sanitation in the community. While this is true to a certain extent, there have been epidemics in communities the origin of which could not be definitely ascertained. In the last few years it has been discovered that a certain percentage of those who have suffered from typhoid fever harbor for an indefinite time the typhoid bacilli in their intestinal tract, being thus a constant source of danger in spreading the disease. The typhoid carrier is an unknown quantity in the community, and unless laboratories can be established in almost every town and the feces of all patients who have had typhoid fever examined from time to time, it would seem an insurmountable task to find the typhoid carriers, and again, if found, the pathogenesis of the carrier state is unsolved and the treatment unsatisfactory, many drugs and methods having been tried and found wanting. It has also been the general belief that when the water and food supply of a community are pure and the sewerage properly cared for, typhoid fever did not prevail. This has often proven fallacious, and in spite of our improved sanitation typhoid fever still stands out as a preventable disease that we do not prevent, and we must look for some further means.

Twenty years ago those of you who are residents of this portion of the State would have thought that malaria could be stamped out by any other means than by looking into the soil, so strong and fixed was the belief that it was a miasmatic disease. We now know that it is a parasitic disease, and we need only make a blood preparation and examine it with the microscope, and if we find the malaria parasite we have positive proof that this particular individual is a carrier of the infectious malarial organisms, and to make this malaria carrier harmless is not difficult. In quinine we have an antidote to kill the parasite with, and if

*Read at the Semi-annual Meeting of the Medical and Chirurgical Faculty at Cambridge, November 12, 1912.

we rid the parasite carriers in any community of their malarial organisms, that place is no longer malarious.

When health officer in an adjoining county in 1894 I prepared and read before the Sanitary League of Health Officers of Maryland what I thought at the time a learned paper on "Malaria and Its Disappearance on the Eastern Shore," which was published in the MARYLAND MEDICAL JOURNAL, a copy of which I have in my hand, in which I predicted that at the present ratio of decrease in a few years malaria will be an unknown quantity on the Eastern Shore, attributing it to several factors, such as better drainage, the better cultivation of land, the growth of pine trees, the planting of peach trees and climatic changes.

Having practiced my profession thus long enough to see many favorite theories explode, I am now a little timid in adopting new ones, following the advice of Pope, who said:

"Be not the first by whom the new are tried,
Nor yet the last to lay the old aside."

Yet after two years of experience in the use of anti-typhoid vaccine, in which 1316 vaccinations have been made and the effects observed, I am prepared unqualifiedly to advocate its use as the best means now known to prevent typhoid fever.

It is a well-known fact that where large numbers of people are quartered, typhoid fever soon makes its appearance. This is especially true in the army and in large institutions, and especially in hospitals for the insane, many of the inmates of which are often untidy, some drinking their own urine and eating their own feces. Springfield Hospital has not been exempt. Since 1903 each autumn has brought us from 10 to 20 cases of typhoid fever among our patients and nurses. In June, 1911, after a consultation with the State Board of Health, it was decided to use the anti-typhoid vaccine. Accordingly, all our patients were inoculated, both male and female, except those immune from previous attacks and those suffering from tuberculosis, diseases of the vascular system and kidneys, together with several of the physicians, nurses and employes; in all, 890.

The injections were made subcutaneously into the arm at about the level of the deltoid insertion, just as you would give a hypodermic injection of morphia, the skin being sterilized by the application of tincture of iodine. All the needles were sterilized after each injection by boiling. The injections were given 10 days apart. The first injection was of a 125-million unit, the second of a 250-million, the third of a 500-million, a unit representing a killed bacillus. The temperature of each patient was taken before each injection, a procedure which is necessary but has not been generally recommended by the advocates of vaccination, as certain unsuspected diseases could thus be detected which might defeat the object of the vaccination, as well as be detrimental to the patient. Each injection was followed by a local reaction, consisting of a redness and swelling of a variable degree, disappearing

in about 12 hours. The general reaction was slight and consisted of malaise, headache, backache, and slight fever like the initial symptoms of typhoid. In only two cases did the temperature rise to over 100°, and these proved to be unsuspected cases of tuberculosis. The injections were made in the afternoon, the patients thus resting all night, and nearly all were ready for breakfast the next morning. The reactions after each of the three injections were the same. Not a single case of typhoid fever developed among the inoculated during the summer and fall, although one nurse who refused vaccination, one male attendant who was employed after the vaccinations and one patient who entered the hospital after the vaccinations contracted the disease, thus showing that the bacilli were somewhere around.

The vaccine consists of a suspension of dead bacilli in sterile normal salt solution, to which is added 25 per cent. tricresol or 5 per cent. carbolic acid as a measure of safety. The vaccine being accurately standardized by counting the bacilli.

The vaccine used was prepared by the State Board of Health and was evidently carefully and accurately done. During the inoculations in 1911 we were unable to obtain enough for the third inoculation from the State board owing to the illness of Dr. Stoner, who prepared it. The surgeon general furnished enough to finish with. The reactions were the same with both vaccines.

Early in June, 1912, all the patients admitted during the year since the last vaccinations (of 1911) were vaccinated. A stronger unit was used—after Major Russell of the United States Army—the first injection being a 250-million unit, the second of a 500-million and the third of a billion; 426 patients and employes in all being vaccinated. The reaction of the larger dose was just the same as the smaller. In but four cases was the reaction severe, temperature reaching 104° with these, but subsiding, however, within 48 hours with no bad after effects. The same technique was used as in the first inoculations. In all there have been 1316 inoculations among the patients and employes without a single abscess or any untoward after effect. There has been but one case of typhoid fever in the hospital during this summer or fall, and this was in a patient who had not been vaccinated, the patient having been transferred from his usual cottage the day the inoculations were made and thus missed. A careful record has been kept of each case inoculated, with the reaction, both local and general, for future reference in compiling statistics. Age does not seem to play any part in the severity of the reaction. The youngest inoculated was seven years old and the oldest 70 years. The reactions were about the same in all. Sanitary conditions at the hospital as regards water, sewerage, etc., are the same that they have been for the last few years, except that the hospital has been more crowded and thus more likely to have epidemic diseases.

With the brilliant results obtained in the United States Army in the late encampment of 20,000 troops at Santiago and along the Mexican frontier, during which only two cases of typhoid were recorded, the results recorded in the large hospitals among the nurses and attendants and the results obtained in several typhoid fever epidemics in different parts of the country, it would seem that more proof of the value of vaccination as a preventive measure in typhoid fever is not needed. However, its use is somewhat *sub judice* and still more witnesses should be heard. We do not know as to how long the immunity lasts, it having been variously estimated from six months to three years. From our experience at the hospital, it has certainly been good for 18 months, as that length of time has elapsed since the first inoculations without a single case occurring among the inoculated.

Major Russell's conclusions in his article published in the journal of the American Medical Association are all borne out by the results of our experience at Springfield. The conclusions are: (1) "That the inoculations are harmless in healthy persons is now well established." In our own cases not a single ill-effect has been discovered among the 1316 inoculated, 890 of whom have been under daily observation by our assistant physicians for 18 months. (2) "That it confers almost absolute immunity against infection." Our typhoid rate has been reduced from 1 to 2 per cent. to nothing. (3) "That it was the cause of immunity of our troops against typhoid fever in the recent Texas maneuvers." (4) "That the duration of immunity is not yet determined, but it is assuredly two and one-half years and probably longer." Immunity has lasted among the 890 vaccinated in 1911 for 18 months. (5) "That only in exceptional instances does its administration cause any appreciable degree of personal discomfort." All our patients were up and ready for breakfast the morning after the inoculations with eight exceptions. (6) "That it apparently protects against the chronic bacillus carrier and is at present the only known means by which a person can be protected against typhoid under all conditions." All known precautions, as boiling water and milk, disinfecting stools, sterilizing clothing, screening the windows, etc., had been tried, but still a few cases developed each fall. (7) "That all persons whose professions or duties involve contact with the sick should be immunized." It is a well-established fact that attendants and nurses are more liable to typhoid infection than those engaged in other occupations—eight times as liable according to the statistics of the Massachusetts General Hospital. (8) "That the general vaccination of the entire community is feasible and could be done without interfering with the general sanitary improvements, and should be done where the typhoid rate is high." This is a safe and sane proposition. Considering the harmlessness and safety of the use of typhoid vaccines, there is no reason why typhoid vaccination should not be compulsory, just the same as smallpox vaccination. Certainly

every case of typhoid that is prevented lessens the liability of the infection of others, both by the possible contact and the various channels of transmission while sick, as well as the possibility of his becoming a typhoid carrier after convalescence.

[NOTE.—I am indebted to my assistants for carrying out the technique and recording the results from various cases.]

DISEASES OF THE STOMACH, INTESTINES AND PANCREAS. By Robert Coleman Kemp, M.D., Professor of Gastro-Intestinal Diseases in the New York School of Clinical Medicine, late Gastro-Enterologist to the New York Red Cross Hospital, Gastrologist to the West Side German Dispensary, Consulting Physician Gastro-Intestinal Diseases to the Manhattan State Hospital, Member American Medical Association, Academy of Medicine, etc. Second edition. Revised and enlarged. Octavo of 1021 pages, with 388 illustrations. Philadelphia and London: W. B. Saunders Company. 1912. Baltimore: The Medical Standard Book Co. Cloth, $6.50 net; half morocco, $8 net.

The stomach and the intestines are the root of so many evils that a book presenting the disorders of these structures in a succinct, clear, scientific manner is indeed a boon to the general practitioner. Perhaps nobody better then the family physician realizes the number of ills which can be traced directly to a disordered gastro-intestinal tract. If the stomach is out of commission, the rest of the body participates as a result of improper nutrition. Consequently, a healthy condition of this system is much to be desired, and it is the function of the above-mentioned volume to educate the profession in bringing the gastro-intestinal canal back to normal when diseased. Besides the features of the first edition, the present embraces chapters on colon bacillus infection and diseases of the pancreas. The reviewer concurs in the belief of the author that the true gastric neuroses are extremely rare and, like the writer, attributes obscure gastric disturbances to disease of the gall-bladder, appendix, etc. The book is replete with good sound advice; for instance, in the chapter on appendicitis when speaking of the treatment, the author advises complete abstainal from food until the temperature reaches 100° Fahr. This is excellent and safe advice, but to our way of thinking food had better be withheld until it reaches practically normal. We entirely concur with his belief that if symptoms warrant, operation should be done early. The section of the book, however, which no doubt will be found most instructive is that on the treatment by mechanical means of the visceral ptoses. So much good can be done by proper mechanical appliances in association with guarded exercises to the sufferers with fallen internals and the author has put the subject so plainly, intelligently and simply that every physician should read what he has to say. The remainder of the book also is of the highest order.

HERNIAS OF THE OVIDUCT, OVARY AND OVIDUCT AND OVARY

By Aimé Paul Heineck, M.D.,

Surgeon to the Jefferson Park Hospital, to the Grace Hospital and to the Cook County Hospital, Chicago. Professor of Surgery, Bennett Medical College, Loyola University.

In the female, the frequency of hernias, and especially of hernias of the internal genitalia, has been and is still underestimated. Owing to the lack of study heretofore given to this clinical entity, hernias of the uterine adnexae are often overlooked, not uncommonly misdiagnosed, and therefore subjected to injudicious treatment; harmful alike to the individual and to the hernial contents, prejudicial alike to the patient's general well-being and to her reproductive powers. Impressed by the clinical importance of the condition and surprised at the insufficent consideration given to the subject in even the most modern gynecological and surgical text books, I have collected the following data, which may prove of service to some of my professional colleagues as well as to future investigators of the subject. Knowledge of the occurrence and familiarity with the symptomatology of a clinical condition lead to its more frequent and more timely recognition.

Soon after beginning the consideration of the subject, we became convinced that deductions and conclusions to be valuable should be based solely upon the study of cases whose accuracy of diagnosis is self-evident. Therefore, in the preparation of this paper we have only considered cases in which the hernial contents were demonstrated at the dissecting, autopsy or operating table.

We have conformed to the nomenclature in actual use; however, to better insure precision of classification and a more intelligent discussion of the subject, we define, perhaps needlessly at times, the terms employed. The word hernia signifies the permanent or temporary protrusion of one or more viscera from their normal situation through a normal or abnormal opening in the walls of the cavity within which they are contained. It implies the existence of a hernial ring, of a hernial sac, of hernial sac contents and of sac coverings. In the hernias discussed in this article, the protruding organ was always either an ovary, an oviduct, or Fallopian tube and an ovary. In some cases, as associated hernial contents we find omentum, a segment of the ailmentary canal, a part of the urinary bladder, a rudimentary uterine horn, or the entire uterus, be the latter organ rudimentary, infantile or of normal development. The tube or ovary or both in part or in their entirety may be herniated. All the hernias herein considered are external hernias; that is, their outermost overlying saccular covering is skin, and each, after reaching a certain stage of development, gives rise to a more or less visible,

more or less palpable external swelling in the inguinal, femoral, ventral, obturator or ischiatic regions, depending upon the anatomical location of the hernia. Internal hernias, that is hernias in which one or more loops of intestine find their way into pouches or recesses in the posterior peritoneal wall, and diaphragmatic hernias, be the latter true or false, congenital or acquired, constitute other chapters of surgery.

The escape of the uterine appendages from their normal situation may take place through any of the weak spots or openings of the lower abdominal or abdomino-pelvic cavities. A hernia originating either in the internal or in the external inguinal fossae and escaping above Poupart's ligament is an inguinal hernia; if escaping beneath the same ligament, it emerges through the crural canal and the saphenous opening, it is a femoral hernia; if through the obturator canal, an obturator hernia; if along the course of the gluteal or sciatic nerves and vessels, emerging almost always above, very infrequently below the pyriformis muscle, very rarely through the lesser sacro-sciatic foramen, a gluteal hernia; if through an operative scar in the abdominal wall, a post-operative hernia.

Though sanctioned by long usage, the classifying of hernias into congenital and acquired is, at times, misleading. It is misleading because it is practically impossible to determine the congenital or acquired nature of many hernias. Furthermore, the term congenital hernia, as now used, does not imply in the female that the hernia was present at birth, as it is also applied to hernias whose post-natal development is due to predisposing conditions of congenital origin; developmental defects, persistence of transitory embryonal or fetal states which, owing to their non-disappearance with growth, permit the occurrence of outward visceral displacements. Some hernias are congenital in the truest sense of the word; they are complete at birth, hernial contents being then present. In most of the so-called congenital hernias, the sac only is existent at birth; in an acquired hernia, the sac is always of post-natal development, and in all but hernias par glissement is entirely derived from the parietal peritoneum. Congenital hernial sacs result from the want of closure of peritoneal processes, such as the processes vaginalis peritonei in the male, the canal of Nuck in the female, etc., normally present in the fetus. Congenital hernias may appear at any period of life.

Orifices for the transmission of vessels and ducts are normally present in the muscular and aponeurotic layers of the abdominal walls. An acquired hernia is formed by the gradual or sudden escape through these orifices, pathologically widened, of viscera normally contained within the abdominal cavity; the viscera in their passage through and beyond the abdominal wall create paths of escape for themselves by bulging and pushing forward the parietal peritoneum.

In many cases, the congenital or acquired nature of the hernia

is either too vaguely stated or is left unmentioned. Femoral hernia seldom occurs before adult life.

Tubal, ovarian and tubo-ovarian hernias occur in the colored and in the white race. Commonly, the condition is unilateral; infrequently, it is bilateral. When bilateral, the hernias may or may not be developed to the same degree on both sides. The bilaterality may date from birth; may be acquired. In the latter case, the hernias may from the first have been bilateral or an interval of time of shorter or greater length may have intervened between the appearance of the two hernias. In Broca's case, when patient was eight months old, the right inguinal hernia appeared, but the left inguinal hernia did not become manifest before the patient was four years of age. All the bilateral, tubal, ovarian or tubo-ovarian hernias recorded in the medical literature of the last 20 years are of the inguinal variety. This is in accord with a well-known fact that in both sexes double femoral hernias are less frequent than double inguinal hernias.

A tubal, an ovarian or a tubo-ovarian hernia may co-exist with one or more hernias of other organs. Multiple hernias are not infrequent, the hernias present being either of the same or of different types, as two inguinal hernias or one inguinal and one femoral hernia on the same or on opposite sides of the body.

The hernias which we have under consideration may or may not be associated with non-development, malformation or absence of the other internal, or of some external genitalia. In Martin's (Kossmann) case, a hernia of the left tube and ovary, the uterus was displaced upward, forward and to the left by a cyst of the right ovary having the volume of a man's head.

In almost all the cases the operation performed was a herniotomy, and as herniotomy affords little opportunity for direct examination of the pelvic organs, the condition of the non-herniated genitalia was determined in only a few cases.

Hernia is a widespread disease. The relative incidence of hernias of the internal genitalia as to age corresponds to that of hernia in general. In our series, the youngest patient was four weeks old at time of operation. Nicoll operated successfully for ovarian hernia on two infants, each one and a half months old. The oldest patient operated on was 78 years old. She had a left tubal obturator hernia. Lickley reports a right tubo-ovarian obturator hernia observed in a dissecting-room subject who had died of general debility and hemiplegia at the age of 87 years. In many cases the age is not stated. The age given by most authors corresponds to the age of the patient at the time of operation and not to the age at which the hernia first appeared.

The study of the reported cases demonstrated:

(a) The frequency of hernias during the first year of life.

(b) The rarity of the condition from the first to the fifteenth year of life.

(c) The noticeable progressive increase in the number of

hernias observed from the fifteenth year on, the maximal frequency being seen during the fourth decade of life.

(d) After the fortieth year, there is a decline of the number of hernias; they become relatively rare as the extremes of life are approached.

During the child-bearing period, hernias of either or of both uterine appendages have been observed in nulliparae, in primiparae and in multiparae.

Etiology.—The predisposing and exciting causes of tubal, ovarian and tubo-ovarian hernias are shown by an analysis of the collected cases to be the same as those of other hernias in the female. The persistence of the canal of Nuck is an etiological factor of the greatest significance in the causation of inguinal hernias. The canal of Nuck, the homologue of the processus vaginalis peritonei in the male, is a peritoneal diverticulum accompanying and adhering intimately to the round ligament, descending in some cases as far as the insertion of that ligament in the labium majus. This peritoneal process, whose dates of origin and disappearance are not accurately known, is usually found completely obliterated at birth; it may close after birth; it may even persist throughout life. When the canal of Nuck is only partially or completely unobliterated, it forms a potential hernial sac and is conceded to be the most important congenital predisposing cause to inguinal hernia formation. It is a matter of common knowledge that preformed sacs are not of infrequent occurrence in the inguinal region. They have been found in other hernial regions. A sudden or forcible increase in intra-abdominal pressure, such as can be determined by muscular effort, by a misstep in an attempt to save one's self from falling, can lead to hernia formation by causing the irruption in a preformed sac of a tube, an ovary or a tube and ovary. As during infancy, the internal genitalia can neither be displaced by their physiological activity, which is nil, nor by the development of pelvic tumors (rare during early childhood), nor by muscular effort, it follows that hernias of the uterine appendages, at that period of life, are due to such congenital anatomical defects as facilitate tubal, ovarian or tubo-ovarian displacement.

Though, as an etiological factor in the production of hernias, the existence of hereditary predisposition is denied by some authors, to us the influence of heredity appears positive. Hernia being a malformation often due to developmental arrest, such as non- or incomplete obliteration of the processus vaginalis peritonei, non-obliteration of umbilical ring, etc., it is subject to hereditary transmission. It is reasonable to assume that like structural characteristics beget a like predisposition and a like resistance to hernia development. Among other etiological factors should be mentioned:

1. All conditions associated with increased mobility of the uterine appendages:

(a) Lengthening of the broad ligaments consecutive to repeated pregnancies.
(b) Pathological relaxation of the ligaments due to puerperal sub-involution.
(c) Abnormal length of the broad, ovarian and infundibulo-pelvic ligaments.
(d) Relaxation of the other tubal, ovarian and uterine ligaments.

2. All conditions that tend to increase the intra-abdominal pressure:
(a) By overcoming the resistance offered by one or another of the weak points of the abdominal wall.
(b) Occupations necessitating repeated muscular efforts associated with increased intra-abdominal tension, as the lifting or pushing of heavy weights, etc.
(c) Physiological or pathological states which distend the abdominal cavity, which stretch the abdominal parietes and widen the orifices normally present in the muscular and aponeurotic layers of the abdominal wall: Enteroptosis, obesity, abdominal tumors, ascites, pregnancy, etc.

3. All conditions which weaken the abdominal wall:
(a) Acute or chronic diseases debilitating the organism.
(b) Obesity.
(c) Traumatism.
(d) Enteroceles, epiploceles and entero-epiploceles.
(e) Feeble development or atrophy of the aponeurosis of the transversalis muscle and of the conjoined tendon.
(f) A shortening of the round ligament of the hernial side.

Hernial Sacs.—Congenital hernias have sacs of prenatal formation. That the canal of Nuck remains patent in many cases long after birth, even into adult life, has been proven by a number of investigators. Acquired hernial sacs are formed of parietal peritoneum forced by intra-abdominal pressure through some congenital or acquired defect in the abdominal walls.

In the female the following anatomical characteristics are strongly suggestive of the congenital sacs: Great vascularity, absence of sub-serous fat, folds, valvular or diaphragmatic constrictions, cyst-formations, scarlike induration of the wall, etc. In congenital inguinal hernias, it is also noted that the round ligament is intimately adherent to the sac.

As we see, the sac results from the bulging outward of the parietal peritoneum without solution of continuity. It consists of a neck, body and fundus. Of these three, the neck is the most important. It is through it that the general peritoneal cavity communicates with the hernial sac cavity. It may be the site of constriction. The fibrous envelope of the sac is due to the

condensation of the fibrous layers which the hernia in developing pushes forward.

The internal surface of the sac, whether the latter be congenital or acquired, has all the peculiarities of serous membranes.

In the female, encysted inguinal hernias result from partial closure of the canal of Nuck, the peripheral portion of which is transformed into a cryst in which a developing hernia prolapses or from the sinking of a hernia in pre-existing hernial hydrocele.

There is really no sacless hernia; but the herniated viscus may be an organ only partially covered with peritoneum.

In sliding hernias, the anterior and lateral portions of the sac are, as in ordinary hernias, derived from the parietal peritoneum, while the remaining portion is formed by the anterior surface of the herniated cecum, sigmoid, bladder or Fallopian tube.

Hernial sacs may be dome-shaped, cylindrical, digitiform, sacculated or irregular; may show constrictions with intervening dilated portions. Most femoral sacs are small and not infrequently are embedded in a mass of fat. The sac in recent hernias may be very thin. In children and in young infants, sac is extremely thin.

Hernial Fluid.—The reporters not infrequently state that fluid of some nature or other was present in the hernial sac. The fluid may be serous, sanious, muco-purulent, purulent or fetid in character.

HERNIAL SAC CONTENTS.

Tubal Hernias.—The tube, either in part or in its entirety, may be the sole content of the hernial sac. As associated hernial contents, a portion of the urinary bladder, normal intestine, gangrenous intestine and omentum were noted. The herniated tube may be normal and free; may be adherent to sac; may be strangulated; may show inflammatory lesions; may be cystic; may be the seat of a pyosalpinx.

Ovarian Hernias.—The ovary may be the only content of the hernial sac; or may be associated with a cystic parovarium, with omentum, with intestine or with a rudimentary uterus. The herniated ovary is reported as being in some cases normal, in others enlarged to twice its normal size, infiltrated with blood, the seat of a large hematoma, adherent to sac, cystic, to have presented areas of suppuration; to have shown gangrenous changes.

Tubo-Ovarian Hernias.—Hernias of the tube and ovary constitute the largest number of hernias of the uterine appendages. As associated hernial contents may be mentioned: Urinary bladder, Meckel's diverticulum, the appendix vermiformis, omentum, intestine and the uterus.

We know of only two cases in which gestation occurred in an inguinal hernial sac; both were tubal pregnancies.

The herniated organs may be normal, may show slight or marked pathological changes. The displacement of a tube or of

an ovary into a hernial sac is unfavorable to its anatomical and functional integrity. In a hernial sac, these organs are exposed to repeated slight traumatisms and to circulatory disturbances. The herniated ovary frequently undergoes cystic changes; may show atrophy; may show enlargement; may be undersized.

The herniated tube may be the seat of suppurative salpingitis, of abscess, of tuberculosis; may be adherent to sac by an inflammatory band. We must not forget to state that a tube and ovary present in a hernial sac do not always have the same reciprocal relation that they have in the abdominal cavity, and that the pathological changes which they show may antedate their displacement into a hernial sac.

Reducible Hernias.—In reducible hernias, and, at first, practically all hernias are reducible, the hernial contents either return spontaneously into the abdominal cavity when the patient assumes the recumbent posture or they can be manipulated back, with more or less difficulty, but without a cutting operation, into the cavity from which they escaped. Even in reducible hernias, the sac early contracts adhesions to neighboring tissues and becomes irreducible. The terms reducibility, irreducibility, torsion and strangulation have reference only to the hernial contents and not to the sac.

Reposition, spontaneous or manual, may be temporary, may be permanent. Many reducible hernias reappear as soon as the standing posture is assumed; others, to reprotrude, require more or less muscular effort on the part of the patient.

Irreducible Hernias.—When the contents of a hernial sac cannot in their entirety be manipulated back into the abdominal cavity, the hernia is said to be irreducible, provided that there is not any or but a very slight interference with the blood supply of the herniated organ or organs, and that there is no disturbance of function. If irreducibility and both, functional and circulatory, disturbances are present, the hernia is designated as strangulated. Irreducibility, partial or complete, predispose to complications of a serious nature: Inflammation, incarceration, strangulation and torsion.

The irreducibility of hernias is dependent upon one or more of the following factors:

(a) Difficulties incident to manipulating a small movable body such as the ovary through a small opening.

(b) Relative narrowness of the hernial canal: Femoral, inguinal, etc.

(c) Sudden increase in size of hernia resulting from some unusual muscular effort.

(d) Changes in the hernial contents: Increase in bulk from deposit of fat, from cyst formation in mesentery, in omentum, from inflammatory or neoplastic changes.

(e) Adhesions of inflammatory origin: (1) Between sac and contents; (2) between the different contents.

(f) Large volume of the hernia.

(g) Sliding hernias (hernias par glissement).

The irreducibility of a hernia of the uterine appendages is due in some cases to the presence as associated hernial contents of the urinary bladder, of the cecum, or of the sigmoid. In other cases, the irreducibility is due to the fact that the layers of the broad ligament, as they leave the Fallopian tube, enter into the formation of the hernial sac.

Strangulated Hernias.—All strangulated hernias are irreducible. In addition to irreducibility, they present a constriction of the hernial contents of such a degree as to seriously interfere with the circulation of the blood in the herniated organ or organs. "If the pedicle of a tumor is tied off or if a finger is surrounded tightly by a string, the parts distal to the ligature do not become inflamed; stasis and gangrene result" (Alberts). The same primary changes occur in the contents of a strangulated hernia; the inflammatory changes are secondary to the circulatory disturbances. There is interference first with the venous circulation; then with the arterial. As a result of this interference with the circulation, we have a serous exudate, the amount of which depends upon the degree and duration of the strangulation and also upon the extent of the secreting surface. The sequence of events is as follows: Congestion, stasis, serous exudation, then inflammatory phenomena and gangrene. Strangulation of a herniated tube or ovary is not as dangerous a complication as strangulation of a herniated loop of intestine.

Strangulated inguinal hernias may be congenital or acquired. Strangulation can occur at any age, irrespective of type of hernia or of hernial contents.

As hernial contents can be mentioned the following organs: Fallopian tube, ovary, tube and ovary, tube and a portion of the urinary bladder, tube and a loop of small intestine, ovary and intestine, tube, ovary, intestine and omentum, uterus and adnexe of one side, loop of intestine, uterus and left adnexe.

The symptoms given by the strangulated inguinal hernias are those of inflamed hernias. Symptoms of intestinal obstruction may also be present.

Torsion of the Pedicle.—This complication, peculiar to ovarian and to tubo-ovarian hernias, is not of unusual occurrence. As far as we have been able to determine, torsion of the pedicle has been observed only in irreducible congenital hernias of the inguinal type.

The two youngest patients were 4 and 11 weeks old, respectively; the oldest, a poorly nourished child, was 14 months old. All the other patients were less than one year old. The right and left side are involved with about the same frequency. The occurrence of this accident is favored by the mobility of the ovary and the slenderness, at this period of life, of the pedicle of the herniated organ or organs.

The pedicle, usually composed of the Fallopian tube, broad ligament and contained vessels, may have made a half-turn upon itself; may be twisted twice, thrice or several times upon its axis. The pedicle may be twisted in any part of its course.

If unrelieved, torsion of the pedicle determines in the hernial contents anatomical changes similar to those caused by strangulation. The impeded return of blood in the veins leads to congestion and swelling of the organ or organs below the twist. There are noticed in the hernial contents the following circulatory disturbances: Congestion, stasis, thrombosis, vascular rupture (ovary seat of large hematoma) and interstitial hemorrhages. The interstitial hemorrhages and the serous transudates lead to tissue dissociation.

In torsion of the pedicle, the amount, odor and color of the hernial fluid depends upon the tightness and duration of the twist and upon the extent of the gangrenous changes. The fluid present in the hernial sac may be serous; may be blood-stained, dark-colored, reddish brown. Torsion of the pedicle gives rise to symptoms somewhat analogous to those of strangulated intestinal or omental hernias. In fact, the condition has frequently been diagnosed as strangulated intestinal hernia.

(To be continued.)

Book Reviews.

A Textbook on the Practice of Gynecology. For Students and Practitioners. By William Easterly Ashton, M.D., LL.D., Fellow of the American Gynecological Society, Professor of Gynecology in the Medico-Chirurgical College and Gynecologist to the Medico-Chirurgical Hospital, Philadelphia; Formerly Lecturer on Gynecology in the Jefferson Medical College, Philadelphia; One of the Founders of the Congress International De Gynecologie et D'Obstetrique; Member of the American Medical Association, etc. Octavo of 1100 pages.

Nothing speaks so loudly for the popularity of this book as the fact that since 1905, when it was first presented to the medical profession, it has gone through five editions and numerous reprints. The medical profession is very discriminating, and it is soon noised about whether a publication is with or without merit. Therefore, according to this standard of valuation, Ashton's "Practice of Gynecology" has and does meet a definite need. It also augurs well for the profession that our ideas are changing so rapidly that within such a short period of time, so many additions have been made to our knowledge in gynecology as to call forth such a succession of new editions of noteworthy efforts. After a careful perusal of the pages of the present edition the

reviewer has nothing but praise for the latest effort of the writer. The changes, though comparatively few, will be found to increase the usefulness of the volume. Indeed, today as heretofore it will stand as a model of its kind. The keynote of the volume before us is practicalness, and the author by training is well fitted to make a book which is adapted to the purposes for which it is intended; namely, a book on the practice of gynecology as applied to the treatment of women's troubles in actual practice. As in former editions, so here, the illustrations are numerous and excellently executed, true to nature and helpful. Among the noteworthy changes are a modernization of the chapters on hematology as it affects surgery; the treatment of syphilis by salvarsan, treatment of cystitis, appendectomy; the use of tincture of iodine as an antiseptic in sterilizing the skin for an operation, and alterations in the technic of many of the operations. Among the new material are chapters on the use of Coley's mixed toxin in inoperable sarcoma of the genito-urinary tract, actinomycosis of the uterine adnexa, Krunkenberg's tumor and pseudomucinous cyst-adenoma, the Fowler-Murphy method of treating suppurative peritonitis and a number of other subjects of equal interest.

Diseases of the Mouth. For Physicians, Dentists, Medical and Dental Students. By Professor Dr. F. Zinsser, Director of the Department of Dermatology at the City Hospital, Lindenburg; Dozent at the Academy for Practical Medicine, Cologne. Translated and edited by John Bethune Stein, M.D., Professor of Physiology at the New York College of Dentistry; Late Instructor in Genito-Urinary Diseases at the College of Physicians and Surgeons (Medical Department of Columbia University), New York City. With 52 colored and 21 black-and-white illustrations. New York: Rebman Company. Cloth, $7 net. 1912.

This book should, and no doubt will, exert a powerful influence in directing attention to diseases of the buccal cavity, a subject which hitherto has been woefully neglected. Through a complete exposition of the subject, augmented by a pictorial review, the reader is fully apprised of the various diseases of the mouth and their clinical appearances. This is a very effectual method of driving home a lesson, but one, indeed, only too frequently neglected. This feature alone makes the book very valuable to physicians when dealing with obscure lesions of the oral cavity. With unusual clearness the author lays before us the picture of oral diseases and most graphically outlines their differential diagnoses. The translator is to be congratulated not only upon the excellence of his rendition of the original into English, but also upon his foresight in supplying such a needed link in the English literature.

MARYLAND MEDICAL JOURNAL

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BALTIMORE, JANUARY, 1913

INTERFERENCE OF LAY PUBLICATIONS IN MATTERS MEDICAL.

EVERYONE with any intelligence at all thoroughly realizes the tremendous influence which the lay press (newspapers and popular weeklies and monthlies) exerts in shaping and influencing popular thought. As a matter of fact, it is the only avenue of information through which a large majority of the population become familiarized with the events of the day. It is therefore plainly the duty of editors of such publications to be extremely careful and discerning when they give out medical information, as many times more harm than good may result. Editors must realize that they are alike judge, jury and court-of-last-resort, which threefold office renders it incumbent upon them that before issuing statements on scientific and medical matters they should be absolutely sure of the ground upon which they are treading, as the setting aright of a statement but partially understood or totally misunderstood is no easy matter, and is ofttimes impossible of accomplishment.

Thus the profession loses valuable time. The habit of employing a layman to write upon medical achievements and methods is especially pernicious, as the physician is a very peculiar compound, and does not relish interference in his affairs from such a source. When a publishing firm wishes to give publicity to recent discoveries it should first obtain the permission of the discoverer or the man who has done the greatest amount of work in that particular line; and, at any rate, should see that the article is prepared and sanctioned by a number of reputable physicians. In this way, and this way alone, can a firm be sure it is giving out correct data and is not doing actual harm. Otherwise it puts in the hands of the public a weapon against the profession which can be used to its disadvantage. It is the easiest thing in the world for some self-opinionated layman to insist that his own diagnosis of his disease was correct, and to insist upon a use of the "marvelous discovery" of which he had read in a "thoroughly reputable" magazine, and to

find the doctor who would use the remedy in order not to lose the patient; and the result is always that the method of treatment suffers, both in the minds of the public and the profession.

The occasion of these remarks is the appearance in the January issue of Pearson's Magazine of an article on the Schafer Phylacogens, by Arno Dosch. As is well known by the profession, the status of these preparations is not as yet out of the experimental stage, and before they are finally accepted as of definite value much more experimental work with them will have to be performed. Undoubtedly, many cures of rheumatism and arthrites from their use have been and are being recorded; still, their exact place in our therapeutic armentarium has not been definitely decided. Being a member of the profession and well aware of its antipathy toward the exploitation of remedies of any character whatsoever in the lay press to readers-at-large, especially before their true value is thoroughly known, we consider that such methods as employed by Pearson's will hamper rather than advance the introduction of scientific advances.

The persons most interested have appealed in vain to Pearson's, but vehement protest has been without avail. The possible antagonism which may be aroused in the medical fraternity by the appearance of such an article in such a place has been pointed out to them, but it has been useless. The only place a lay journal has in medical matters is in teaching hygienic lessons, and such simple lessons as those of first aid; but self-medication or the exploitation of anything which may be misconstrued as a specific for any ill, no matter how slight or how serious, cannot be condemned too severely. It leaves in the hands of the public too poignant a weapon against the medical profession. From a careful perusal of the correspondence in the matter we believe that the editor of Pearson's is not intentionally working an injury to the medical profession, but is either misguided by bad advisers or is sadly mistaken in his judgment concerning the advisability of such an article. He is apparently sincere in his belief that his publication will be conferring upon suffering humanity a ray of hope of deliverance from their afflictions, and is therefore justified in the publication of this article. We are extremely sorry he has taken this view, and believe he has delayed the general acceptance of a good treatment; but in justice to him, he is in no wise the worst sinner among lay editors in this regard, for some of the simple hygienic measures we have seen advocated in one of our most widely-circulated monthlies would put an Indian herb doctor to shame.

Medical Items.

The Board of Medical Examiners of Maryland has incorporated in their record this expression of appreciation of the character and services of our fellow-member, Dr. Franklin Buchanan Smith, who has been called hence.

"Dr. Smith was one of the original members in the organization of this board, having been elected by the faculty in 1892, and was present at the first meeting held June 2, 1892. His successive re-elections indicate the value of his services as a member of the board and his sympathy with the effort to advance the standard of medical education and promote the higher and better interests of the profession. Our relations with our esteemed associate confirm this estimate of his work and worth.

"In his death the medical profession has lost a member whose constant effort was toward higher ideals, a greater efficiency and a nobler consecration of self to service; this board, a member always helpful and animated by conscientious purpose; the State, a citizen whose activity and participation in public affairs was always in the direction of the uplift and advancement of the community of which he was a respected and honored member.

"To the distressed family of our brother we extend our sincere and heartfelt sympathy, and the secretary is directed to publish this minute in the *Bulletin*, the Maryland Medical Journal, and transmit a copy to the widow of our deceased brother."

The property of the Pine Bluff Sanitarium, located on the Wicomico River, has been purchased for use as a State institution for the care of incurable cases of consumption. The property comprises about 20 acres of land. There is upon it a main building, and the entire tract, except one acre surrounding the building, is covered with a dense growth of pine trees. The board has selected Dr. George W. Todd of Salisbury, a graduate of the University of Maryland in 1885, as superintendent of the new institution, and the institution will be ready to receive patients January 1.

Dr. Hampson H. Biedler, who has been quite ill with pneumonia, is reported to be convalescing rapidly.

Drs. Francis E. Harrington of Cumberland and James C. Holdsworth of Eckhart Mines, Md., are suffering with smallpox, contracted from patients suffering with the disease. Miss Myrtle Clark, a nurse in the Western Maryland Hospital, is also suffering with a light case.

The following officers were elected by the Southern Surgical and Gynecological Society at its annual meeting, held in Newport News, Virginia:

President—Dr. John Young Brown, St. Louis.

First Vice-President—Dr. F. Morgan Vance, Louisville, Ky.

Second Vice-President—Dr. Lomax Gwathney, Norfolk, Va.

Secretary—Dr. W. D. Haggard, Nashville, Tennessee.

Treasurer—Dr. Le Grande Guerry, Columbia, S. C.

Dr. Floyd McRae of Atlanta was named chairman of the committee on arrangements for the next meeting.

Atlanta, Ga., has been selected as the next meeting place.

Dr. Richard C. Massenburg is seriously ill at his home in Towson. Dr. Massenburg is Health Officer of the Ninth District. During the Civil War he served in the Confederate Army. He was for many years secretary of the Baltimore County Medical Association.

Dr. Ralph B. Seem has assumed his duties as an assistant superintendent at the Johns Hopkins Hospital. He is a graduate of Lafayette College, of the class of 1902, and of the Johns Hopkins Medical School in 1906. He was resident physician of St. Luke's Hospital, South Bethlehem, Pa., for two years, and then superintendent of the James Walker Memorial Hospital at Wilmington, N. C., for three years before coming to Hopkins.

The Allegheny Hospital of the Sisters of Charity was opened for inspection on December 9. It has accommodations for 100 patients.

Dr. George C. Wegefarth was operated on for appendicitis December 12 at the Church Home and Infirmary.

Dr. John Arthur F. Pfeiffer, 1112 North Stricker street, has returned from a trip abroad.

Drs. J. Lee Hopkins of Havre de Grace, Md., and Louis A. Monmonier of the Green

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Spring Valley, suffered serious losses by fire during the past month.

Dr. Philip B. Housekeeper of Northeast, Md., is critically ill in the German Hospital, Philadelphia.

Dr. Andrew Watson Sellards of the Johns Hopkins Hospital has gone to Turkey to assist in the American National Red Cross Society's fight against cholera.

Dr. Thomas B. Johnson of Frederick, Md., is suffering considerable pain from a badly swollen and bruised face, due to an assault made upon him by Harry Buch, an agitator, whom Dr. Johnson spoke to in reference to an overdue account.

The Baltimore Medical Society has issued a letter to each member, requesting aid in suppressing the "free advertising" of physicians and their accomplishments in newspapers, and requests physicians to report each violation of the ethical rule.

The Calvert County Medical Association has elected the following officers for the ensuing year: President, Dr. Oliver D. Simmons of Bowens; vice-president, Dr. George Peterson of Wallville; secretary-treasurer, Dr. John W. Leitch of Huntington, and censor, Dr. Isaac Newton King of Barstow, Md.

The famous Flint Club held its annual meeting in the Rennert Hotel, Baltimore, on December 5, 1912. Dr. J. H. Branham was toastmaster, and among the speakers were Drs. John D. Blake, Charles G. Hill, William Caspari and Richard Johnson. The druggists' Wedgewood Club was at the same time holding its annual meeting in the adjoining room, and the two clubs exchanged greetings.

MARRIAGES.

John Charles Norton, M.D., University of Maryland, '12, of Hagerstown, Md., to Miss Ruth Cleveland Atkinson of Baltimore, at Baltimore, December 3, 1912.

Franklin Webb Griffith, M.D., Johns Hopkins Medical School, '06, of Asheville, N. C., to Miss Grace Howlett Lemmon, Johns Hopkins Training School for Nurses, '08, of Baltimore, Md., at Baltimore, December 26, 1912.

Michael Albert Abrams, M.D., College of Physicians and Surgeons, '09, of 1634 E. Baltimore street, Baltimore, to Miss Marie Silberstein, also of Baltimore, November 28, 1912.

Carl Voegtlin, M.D., Johns Hopkins Medical School, of Baltimore, Md., to Miss Lillian Kreuter of New York, at New York, December 21, 1912.

Frank Sidle Lynn, M.D., University of Maryland, '07, of 1619 St. Paul street, Baltimore, to Miss Clyde C. Dawson of Griston, N. C., at Norfolk, Va., on Saturday, December 14, 1912.

DEATHS.

Arthur McCabe, M.D., Baltimore University, '97, Queen's University, Ontario, '03, died at his home in Gloucester, Mass., November 12, 1912, aged 45 years.

William A. Dorsey, M.D., College of Physicians and Surgeons, '05, formerly resident physician at Mercy Hospital, Baltimore, was instantly killed on December 17, 1912, by contact with a live wire. Dr. Dorsey was returning from a visit to a patient, and the wires had been blown down by a storm, and he was unable to see them because of the darkness.

Lemuel S. Lawson, M.D., University of Maryland, '67, died at his home in Dallastown, Pa., December 5, 1912, from uremia, aged 73 years.

William Samuel Love, M.D., University of Pennsylvania, '61, died at his home in Winchester, Va., December 12, 1912, aged 76 years.

Michael Joseph Gately, M.D., Georgetown University School of Medicine, '72, died at his home, 111 S. Broadway, Baltimore, December 16, 1912, of apoplexy, aged 65 years.

Alfred B. Giles, M.D., University of Maryland, '80, of 3703 Forest Park avenue, Baltimore, died at his home December 21, 1912, of heart trouble, aged 50 years.

William Hand Browne, M.D., University of Maryland, '50, professor emeritus of English literature in the Johns Hopkins University, died at his home at Sherwood, Md., December 12, 1912, after an illness of one week, of chronic bronchitis, aged 84 years.

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This is a Christian hospital, opened in 1900, two years after a dispensary had been started.

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Jhansi, a city whose population is 55,724, is situated in nearly the geographical center of India. It is a large military cantonment and civil station, and the headquarters of the Indian Midland Railway Administration. Throughout a vast region for hundreds of miles villages are thickly scattered. The city and region are full of Mohammedans in addition to the Hindus. There are not more than 15 foreign Christian missionary workers in the community.

This post requires a woman of thorough medical training, unimpaired physical constitution, good sense, sound judgment, capacity for leadership, a cheerful, hopeful spirit and ability to work pleasantly with others.

Support is provided by the Woman's Union Missionary Society and includes traveling expenses, living quarters and outfit allowance, in addition to the regular missionary salary, which is based upon what experience has shown necessary to maintain the worker comfortably.

For further particulars write to Mr. Wilbert B. Smith, candidate secretary, Student Volunteer Movement, 125 East 27th street, New York city.

Editorial Comment.

THE SALVARSAN SITUATION.

Memphis Medical Monthly.

It has been a matter of great interest to observe critically the trend of sentiment and opinion in this country and Europe with reference to salvarsan. There is no doubt whatever but that the early enthusiasm which attended the first introduction of the drug is waning greatly. That the use of the drug with demonstrable lesions of syphilis is attended with marvelous results has been demonstrated again and again. But, though the use of the drug is in its infancy, it has been amply demonstrated that its use will not thoroughly and finally eradicate the disease. It will be remembered that this was the earlier claim for the drug. The so-called *sterilisatio magna* which was the early claim for a single dose of the drug has been found to be a delusion and a snare. Its strongest advocates now recommend and employ several doses and then advise the use of mercury in some form. In the early burst of enthusiasm this old wheel horse of treatment was completely lost sight of, but now that the shortcomings of its newer confrere are being rapidly realized, it is coming into its own again.

A relatively large number of deaths have been reported and there are doubtless many that have not been put on record. The unfortunate feature of this phase of the question is that as yet we are absolutely and totally unfamiliar and unacquainted with

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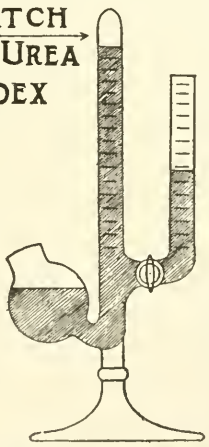
WATCH the UREA INDEX



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the real causes which go to bring about these untoward results when they do occur. True enough that Ehrlich attributed the early fatalities to the use of salvarsan in cases not suited for its administration, such, for instance, as diseases of the nervous or cardio-vascular systems. But the surprisingly large number of deaths which have been reported occurring in young and seemingly robust individuals, having been found free from all traces of these conditions, has served to bring the drug into considerable disrepute. There has not been found any logical explanation for many of the fatalities. Again, it has been charged that some of the fatalities have been caused by bacteria in the distilled water used in the preparation of the drug. Whether or not this is a valid arraignment, we cannot say; but true it is that deaths have occurred in which the water was distilled and sterilized on the spot by men of proven competence.

As has been pointed out, this change of base on the part of the advocates of the drug is not conducive to increase in the esteem in which it is likely to be held by the profession. What is most important of all is this, that sufficient time has not elapsed for the final end results in the cardio-vascular and nervous systems to be noted. What these results will be we cannot tell.

After a careful review of the field, we may summarize the situation as follows:

1. Salvarsan is not a specific in the cure of syphilis.
2. It will work magic with open lesions.
3. Its use is not devoid of dangers; dangers that we now know positively of and those possible future dangers yet to be demonstrated.
4. It is believed that it is due to fairness and candor that the dangers and uncertainties of the treatment shall be fully pointed out to patients, and to a certain reasonable extent at least their decision and best judgment shall govern the plan of treatment.
5. The greatest advantage which salvarsan has over mercury is rapidity of action.
6. The ultimate place of salvarsan will probably be in the treatment of those cases of syphilis which do not yield readily to mercury. In the meantime accumulated experience has demonstrated that the mercury treatment had best be first employed.
7. The causative factor of bacteria in the water is almost positively a myth. Large quantities of salt solutions are used daily in hospitals frequently under circumstances of the greatest haste and untoward symptoms are not noted.
8. Salvarsan should be administered only by those expert in its use. The interior of a vein is a place that the competent surgeon has a great deal of respect for, and he is not going to enter it except for very good cause and under the most favorable circumstances.
9. This is a resume of the literature. Our pages are open to any one with extended experience who will further discuss the question.

A NEW CURE FOR EPILEPSY.

Southern Practitioner.

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from epilepsy, petit or grand mal, and it has proven a *bete noir* to both ancient and modern medicine, first from its incurability, and second, from the almost inevitable resultant insanity of most violent and destructive type. Dr. Ralph H. Spangler, chief of the Medical Clinic of the Methodist Episcopal Hospital of Philadelphia, claims to have discovered a cure for it in *crotalin,* he having given more than 2000 injections of rattlesnake poison to more than 100 epileptics, with, as he says, most gratifying results.

He claims to have cured children with convulsions of a few months standing, as well as older persons who had been so terribly afflicted for as long as 20 years. The rattlesnake poison as a therapeutic agent—crotalin is obtained from the serpent by making him strike into a rubber bag, or by holding its head securely and having an assistant withdraw it from the gland with a hypodermic needle, which, when dried by evaporation between plates of glass in the sun, appears as yellow, scaly crystals. These are dissolved in glycerine and sterilized water, and used in one-hundredth grain doses or less, hypodermatically, at intervals determined by the repetition of the spasms.

Rattlesnake poison possesses two separate and distinct toxic qualities. Although the nature of the changes wrought by it are not clearly understood, there is little likelihood that anyone will deny its power to lessen the clotting power of the blood and to paralyze the brain and nerve centers.

Recognizing that some cases of epilepsy have an intrinsic quality in the blood serum that heightens its clotting strength, Dr. Spangler thought of crotalin as a possible remedy. Obviously, however, there are numerous persons with convulsions or epileptic fits whose blood is just the same as that of the average healthy individual.

Dr. Spangler claims upon testing the venom upon epileptics, both with and without an excessive blood clotting facility, the poison, in proper doses, was found to do its work.

Dr. Spangler found that not only was the violence of the fits appreciably and gradually cut down by the crotalin treatment, but the general sensitiveness and excitability of the nervous system was pacified. Then, again, the general health and mental powers as well as the appetite and nutritive strength of the patient were definitely benefited.

Further developments and clinical results will be required to establish and confirm these claims; and if such be obtainable, a most dread malady will be robbed of its terror, "Craig Colonies," and special institutions for epileptics rendered useless, and the number of inmates of our hospitals for the insane very materially diminished.

DUST AND INFANTILE PARALYSIS.

The Medical Council.

We have been following up, in the California newspapers, the serious epidemic of this disease beginning in Los Angeles on June 15, and rapidly spreading over Southern California. By the middle of August 211 cases were reported in Los Angeles alone, several being adults. The Southern California Public Health Association is making a serious study of the disease, and the tendency is to lay stress upon the dissemination of the disease by dust and flies. There is a great cleaning up and street sprinkling

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crusade in progress out on that coast. This is the season when dust is greatly in evidence in that section, and we are especially anxious to know what conclusions are reached with reference to the question.

Incidentally it may be said that a committee which investigated the matter in Massachusetts reported as follows: "The greatest prevalence of the disease is during the season when there is the most dust. The distribution of cases in several towns on the more dusty streets and the cessation of several epidemics after the streets were well sprinkled have spoken for themselves."

The fall of the year is a great time for dust, and we urge our readers who may discover cases of infantile paralysis in their communities to start an immediate agitation looking to the elimination of street dust.

Dr. G. P. Gehring of Los Angeles writes us, in referring to the epidemic of the disease in that city, that the newspapers are needlessly alarming the citizens and are printing everything about the cases under flaring headlines. Also he contends that the municipality is largely responsible for conditions by allowing an indiscriminate opening of the streets during the dry season for the laying of gas, water and sewer pipes, and for street paving. He contends that there is a probability that the germ flourishes under similar conditions to that of the tetanus germ, and states that the intolerable dust on certain Los Angeles streets covers everything, gets into the houses, and contaminates foods exposed to it. The fact that it is natural for children to play in the dirt aggravates conditions.

SYMPTOMS BRED BY THE MEDICAL EXAMINATION.

Massachusetts Medical Journal.

BERNHEIM in France and Buttersack in Germany have recently been emphasizing anew the suggestion of symptoms to the patient by incautious methods in the examination. This is a fact which all physicians know, but tend to forget. It is pointed out that the similarity in the symptoms in some clinics is probably greatly influenced by the powers of suggestion. Modern teachers of medical students are striving to impress upon these younger minds the far greater value of a statement which the patient made voluntarily or in answer to an indirect question as compared to that in response to a direct question. Here the medical mind has call for qualities almost legal in character: in fact, some say that a legal turn of mind is of great value especially in diagnosis. Dr. Reginald H. Fitz, one of America's greatest diagnosticians, graduated from Harvard Law School before studying medicine.

In examining the abdomen, as for appendicitis, Bernheim first has the patient palpate himself and locate the point of maximum tenderness. Then when he palpates he always commences at a distance from this area. (This is indicated also for other reasons, as for facilitating the examination, etc.) He makes a point of distracting the patient's attention from the special part under examination by questions as regards urination, vision, pains in neighboring joints, etc. Bernheim suggests that disturbances of coordination can often be best tested by asking the patient to jump and perform certain movements as though the effect on the heart were to be tested. Buttersack urges care in cardiac auscultation in acute articular rheumatism, often ausculting from the back as

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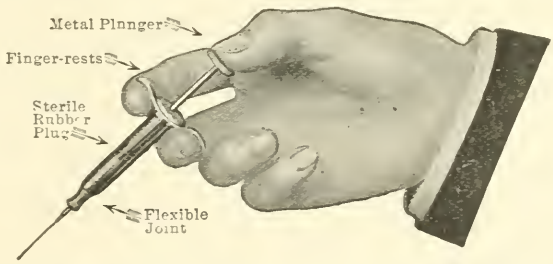

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though the lungs were being tested, and distracting the patient's attention in various ways.

We feel that we are merely emphasizing principles already well known. Every physician must, and generally does, work out his own salvation in adopting ways of bringing out a clear history with as little as possible use of the leading question, and in making his physical examination more productive and less harmful by distracting the patient's attention. These are all parts of the highest medical skill.

ANTI-TYPHOID VACCINATION.

Journal of Medicine and Surgery.

Anti-typhoid inoculation is now recognized by the profession as a safe and sane way to prevent, or at least mitigate, an attack of typhoid, and doubtless would be required by municipal authorities were it not for the fact that the public is notably slow to adopt anything suggested by the profession, because there is an inherent belief that any such recommendation is given with selfish motives. Improved sanitation is gradually wiping out typhoid anyway, and so by the time the public is educated to the point of adopting compulsory typhoid inoculation the disease in cities will be practically nil and so vaccination hardly necessary. However, it has come to stay and will be used in the armies throughout the world, in times of great typhoid epidemics, and by those whose business exposes them to typhoid.

The scientists who have worked out this deserve great credit, almost as much as Jenner himself. The latter was the pioneer of vaccination, and nothing can detract from the great service he has rendered humanity, but these modern scientists are likewise pioneers in preventive medicine, and it is our humble opinion that our descendants will have them to thank for paving the way to the preventive and prophylactic medicine of the future when diphtheria, measles, scarlet fever, whooping-cough, etc., will each and all be held in subjection by a small tube of clear solution—a serum.

We are hardly in accord with those who think all serums, whether prophylactic or therapeutic, the best treatment the profession can offer, but we do recognize some as wonderful and all as good, inasmuch as they are forerunners of the better ones to come.

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From experience with 300 cases, the authors conclude that for patients in whom the speculum can be used semi-weekly treatments once with 25 per cent. silver nitrate applied to the cervix and 10 per cent. to the vagina, followed by an application of petrolatum, and once by a 25 per cent. paste of iodoform in glycerine, give the best results. This treatment is not improved by the simultaneous use of gonococcus vaccine.

For little girls and virgins with an innocent infection, local cleanliness and the use of gonococcus vaccine give the best results. Because of the tendency to recurrence of the infection, however, this is not entirely satisfactory. In all cases with joint complications, vaccine is of great value.—*L. Morrow and O. Bridgman in Monthly Clycopedia and Medical Bulletin.*

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can be disinfected and deodorized by placing in a tub half filled with boiling water to which has been added a little "Platt's Chlorides." The tub should then be closely covered for two hours and the clothes thoroughly rinsed before washing.

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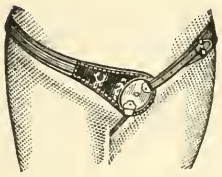

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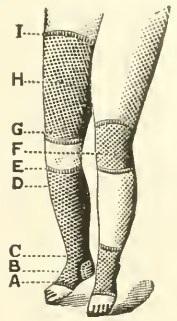

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American Academy of Medicine	Charles McIntire, 52 N. 4th St., Easton, Pa.	
" Acad. of Ophthal. and Oto-Laryngology	Geo. F. Suker, M.D., 103 State St., Chicago, Ill.	
" Anatomists, Association of	G. Carl Huber, Ann Arbor, Mich.	December, 1912
" Assn. of Genit. Urinary Surgeons	E. L. Keyes, Jr., 109 E. 34th St., New York	
" Assn. of Medical Examiners	G. Strobbach, M.D., Miami Bldg. Cincinnati, O.	Minneapolis, June 2-3, '13
" Assn. of Military Surgeons of the U. S.	Charles Lynch, Washington, D. C.	
" Assn. of Path. and Bacteriologists	H. C. Ernst, Harvard Medical School, Boston.	
" Assn. of Railway Surgeons	Louis J. Mitchell 132 N. Wabash Ave., Chicago	
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" Assn. of Obstetricians and Gyn.	Wm. W. Potter, 238 Delaware Ave., Buffalo.	
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" Dermatological Association	James M. F. Winfield, Brooklyn, New York	
" Electro-Therapeutic Association	J. W. Travell, 27 E. 11th St., New York	
" Gastro-Enterological Association	Chas. D. Aaron, 32 W. Adams Ave. Detroit, Mich.	
" Gynecological Society	Le Roy Brown, 70 W. 82d St., New York	
" Laryn., Rhin. and Otol. Society	Thos. J. Harris, 147 E. 40th St., New York	
" Laryngological Association	J. E. Newcomb, 118 N. 69th St., New York	
" Medical Association	G. H. Simmons, 103 Dearborn Ave., Chicago	
" Medical Editors' Association	J. MacDonald, Jr., M.D., New York, N. Y.	
" Medico-Psychological Association	Charles G. Wagner, Binghamton, N. Y.	
" Medical Colleges, Association of	F. C. Zapffe, 1764 Lexington St., Chicago, Ill.	
" Neurological Association	Alfred R. Allen, Philadelphia, Pa.	
" Ophthalmological Association	W. M. Sweet, 1205 Spruce St., Philadelphia.	
" Orthopedic Association	Robert B. Osgood, 372 Marlborough St., Boston	
" Otological Society	F. L. Jack, 215 Beacon St., Boston, Mass.	
" Pediatric Society	Samuel S. Adams, 1 Dupont Circle, Wash., D. C.	
" Physio-Therapeutic Association	Otto Juettuer, M.D., 8 W. 9th St., Cincinnati, O.	
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" Proctologic Society	L. H. Adler, Jr., 1610 Arch St., Phila., Pa.	
" Public Health Association	William C. Woodward, Washington, D. C.	
" Roentgen Ray Society	Percy Brown, 155 Newberry St., Boston, Mass.	
" Surgical Association	Robt. G. Le Conte, 1536 Locust St., Philadelphia	Montreal, 1912
" Therapeutic Society	Noble P. Barnes, Washington, D. C.	
" Urological Association	Hugh Cabot, 1 Marlborough St., Boston.	
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International Congress on Tuberculosis	J. S. Fulton, M.D., Colorado Bldg., Wash., D. C.	
Mississippi Valley Medical Association	H. E. Tuley, 111 W. Kentucky, Louisville, Ky.	
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Southern Surgical and Gynecological Assn.	W. D. Haggard, Nashville Tenn.	Atlanta, Ga., 1913
Southern Medical Association	Oscar Dowling, Shreveport, La.	Jacksonville, Nov 12-14, '12
Tri-Medical Soc. of Md., W. Va. and W. Pa.	Percival Lantz, Alaska, W. Va.	
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Tri-State Med. Assn. of Miss., Ark. and Tenn.	R. McKinney, Memphis, Tenn.	
Tri-State Med. Soc. of Iowa, Ill. and Mo.	Jos. E. Chambers, M.D., 918 Pine St., St. Louis, Mo	
Western Surgical and Gynecological Assn.	A. T. Mann, M.D. Minneapolis Minn.	Cincinnati, 1912

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This fraud, which was exposed at an action tried before the Supreme Court of Victoria at Melbourne, and others reported before in the medical literature, show that every physician should see that his patient gets exactly what he prescribed. No "just as good" allowed.

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IN a paper entitled "Treatment of Surgical Tuberculosis by Dioradin" read before the Section of Surgery of the Royal Academy of Medicine in Ireland by R. Atkinson Stoney, M.B., F.R.C.S.I., Visiting Surgeon to the Royal City of Dublin Hospital, the following statement is made:

"I do not wish for a moment to claim that this method of treatment has worked any miracles. I have from time to time seen instances of cure in practically every one of these manifestations of tubercular disease under other methods of treatment, though I must confess the cure has always taken a much longer time to be brought about. But taking the whole fifteen cases together, I think that the results are decidedly good, and they are certainly better than any I have ever obtained by the use of tuberculin in any of its many forms."—*Medical Press and Circular, March 27th 1912.*

DR Joseph Brandaleone, Assistant Surgeon to the Post-Graduate Hospital, in a paper entitled "A New Treatment For Tuberculosis" *(Denver Medical Times, May 1912)* draws the following conclusions concerning the results obtained with Dioradin:

"I would recommend this treatment for incipient stages, where I believe cures can be effected. In the second stage of the disease, cures may follow the treatment, but at least the disease can be arrested and the patient made more comfortable: in the last stage I have found that the treatment makes the patient more comfortable, and prolongs the life. It is worthy of consideration and trial in cases of tuberculosis that will respond at all to any medicinal treatment."

Dr. H. F. Boatman, formerly of the Staff of the Independence Hospital, Iowa, (in an article to the *Southern California Practioner April 1912)* concludes the report of a very interesting case:

"This is not a favorable case for any treatment, but the surprisingly happy results obtained by Dioradin lead me to conclude that in this remedy we have a most potent agent for destroying or inhibiting the growth of the tubercle bacillus."

The *Lancet-Clinic (Cincinnati) for Sept. 28, 1912*, prints a most interesting report of "21 Cases of Tuberculosis Treated by Dioradin," by Drs. M. J. Schwerd and A. L. Goldwater of St. Joseph's Hospital for Consumptives (New York.) The results obtained still further establish the efficacy of the remedy.

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as in my private practice, and in the clinic of the university, and am, perhaps, fairly well qualified to pass judgment."

Pituitrin in Difficult Parturition.

EVERY physician who has any considerable obstetrical practice owes it to himself and to his patients to familiarize himself with the oxytocic function of Pituitrin. Here is an agent which, according to reports in the medical journals of the Old World (notably of Germany)—if obstetricians adopt it generally, as now seems likely—is destined to rob childbirth of much of its pain and terror. What shall we say of such an agent that fails but once in over a hundred cases in which it is used? And that is just what happened in Dresden, according to a report of Vogt of the Royal Gynecological Clinic of that city. Vogt adds: "It was not necessary to have recourse to forceps in a single instance in which Pituitrin was employed."

For the benefit of physicians who are uninformed on the subject, it may be said that Pituitrin is an extract of the posterior or infundibular portion of the pituitary gland. While in use for a number of years—chiefly, perhaps, as a hemostatic and heart stimulant—it is only of late, comparatively speaking, that its value in uterine inertia has been fully understood. The product is prepared and marketed by Parke, Davis & Co., to whom inquiries should be addressed for further particulars of this remarkable agent. Not very long ago the company issued a pamphlet in which a number of interesting and surprising case reports were published. We understand that copies of this Pituitrin pamphlet are still available and may be obtained upon application to Parke, Davis & Co. at their general offices in Detroit, Mich.

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